Remarks/Arguments

Claims 21-47 are pending in the present application. Claims 21, 24, 26, 32 and 39 have been amended. Claims 41-47 have been presented herewith.

Claim Rejections – 35 U.S.C. 112

Claims 24 and 32 have been rejected under 35 U.S.C. 112, second paragraph as being indefinite. Claims 24 and 32 have been correspondingly amended to delete the "e.g." and "such as" terminology, to be in better compliance with 35 U.S.C. 112, second paragraph. The Examiner is therefore requested to withdraw this rejection.

Claim Rejections – 35 U.S.C. 103

Claims 21-40 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2005/0039114 to Naimat et al. (hereafter "Naimat") in view of U.S. Patent No. 5,603,021 to Spencer et al. (hereafter "Spencer"). This rejection, insofar as it may pertain to the presently pending claims, is traversed for the following reasons.

One of the fundamental problems in the art of spreadsheets is that data and functionality are mixed together in the user interface. Modern spreadsheets require the user to specify the destination cell when entering a formula. Further, a formula in conventional spreadsheets returns **a single value** for the cell to which it is related. Tools or **functionalities** such as array functionality have been developed to **imitate**

functions with multivariable output.

A functionality or tool, in this case, requires manual input when modifying a workbook and does not automatically adjust the output when the input changes, for example when the number of input cells changes. In contrast, a function operates on input and automatically adjusts the output irrespective of changes in input data, e.g. the number of input cells.

In contrast to conventional spreadsheet systems, the model builder of an embodiment of the present application is able to handle and perform multi-output value functions without the need for complex and tedious tools requiring manual invocation, by enabling establishment of a function between panels of cells, as variously described for example in connection with Fig. 10 and the corresponding description on page 13, line 4-12, and Figs. 17-18 and the corresponding description on page 17, line 4-26. Because a function in the model builder according to the present application is established between the input panel/variables and the output panel and not a predefined range of cells, the model builder is able to react on the changes in the input panel and adjust output content and dimensions without the need for further manual intervention.

An advantage of an embodiment of the present application is that a function created with the function builder is not inherently connected to a specific cell as in conventional spreadsheets. On the contrary, the operator of the mathematical model builder is free to define input variables containing input values for the function and

output panels containing output values of the function.

The function builder of the present application is further adapted for generation of an output panel comprising a plurality of cells to hold output function values. Thereby tedious and error-prone manual invocation of multi-value functionality is avoided allowing secure and flexible model preparation and adjustment.

Furthermore, an additional important advantage of an embodiment of the present application is that functions are separated from the input variables and the output panels reducing the risk of errors when changing a model, since a function works on panels and not a specific cell in a large cell area as in conventional spreadsheets.

Further, in an embodiment of the present application, flexible model management with highly reduced risk of errors, and provision of general models to be easily amended and adjusted for different specific purposes by a person of ordinary skill without specific knowledge about the model itself are enabled.

Independent claim 21 has been amended to more clearly emphasize the separation of input panels, output panels, and functions in the function builder. Further, claim 21 has been amended to also further emphasize that output panels comprising a plurality of cells for holding output from a multi-value function are provided.

Naimat as primarily relied upon relates to translation of a traditional spreadsheet model to SQL language. Referring to amended claim 21, Naimat does not disclose "a user interface with a display for displaying panels of cells in a work area and means for creating and individually and independently positioning panels of cells in the work area".

Moreover, Naimat does not disclose "a function builder for establishing a function comprising mathematical relations between panels of cells, comprising fields for user specification of a desired function by mathematical operators, and input variables of the function, and wherein the function builder is further adapted for generation of an output panel comprising a plurality of cells to hold output function values."

In the Office Action dated March 5, 2010, the Examiner has asserted that Spencer as secondarily relied upon discloses a formula composer in an electronic spreadsheet system. However, Spencer does not provide "a function builder for establishing a function comprising mathematical relations between panels of cells, comprising fields for user specification of a desired function by mathematical operators, and input variables of the function, and wherein the function builder is further adapted for generation of an output panel comprising a plurality of cells to hold output function values." Spencer thus fails to overcome the deficiencies of Naimat as primarily relied upon.

The electronic mathematical model builder of claim 21 enables a user to build functions between input and output panels of cells, the output panels comprising a plurality of cells, thereby allowing a user to employ multi-value output functions without the use of complex and tedious tools or functionalities. However, both Naimat and Spencer are silent with respect to providing a model builder that enables a user to employ multi-value output functions without the use of complex and tedious tools or functionalities. The cited prior art thus contains no teaching or suggestion that would

motivate one of ordinary skill to modify the prior art to meet the features of claim 21.

Applicant therefore respectfully submits that the electronic mathematical model builder of claim 21 would not have been obvious in view of the prior art as relied upon by the Examiner taken singularly or together, and that this rejection, insofar as it may pertain to claims 21-40, is improper for at least these reasons.

Claims 41-47

Applicant respectfully submits that claims 41-47 would not have been obvious in view of the prior art as relied upon by the Examiner at least for the reasons as set forth above with respect to claim 21, and by further reason of the features therein.

Conclusion

The Examiner is respectfully requested to reconsider and withdraw the corresponding rejections, and to pass the claims of the present application to issue for at least the above reasons.

Pursuant to the provisions of 37 C.F.R. 1.17 and 1.136(a), the Applicant hereby petitions for an extension of three (3) months September 5, 2010, for the period in which to file a response to the outstanding Office Action. The required small entity fee of $555.00 should be charged to Deposit Account No. 50-0238.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment for any additional fees that may be required, or credit any overpayment, to Deposit Account No. 50-0238.

Respectfully submitted,
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